DRAINAGE STUDY ADDENDUM FOR

FUERTE RANCH ESTATES TRACT NO. 5343

COUNTY OF SAN DIEGO, CALIFORNIA

Prepared On:

November 9, 2009

Prepared By:

POLARIS DEVELOPMENT CONSULTANTS

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SDC DPLU RCVD 11-09-09 **TM5343RPL4**

This drainage study addendum has been prepared at the request of the County of San Diego in order to identify any major changes in the drainage calculations or proposed drainage facilities as a result of minor changes to the project design that have occurred since the Drainage Study Addendum dated 10-08-2009. This addendum will address what changes have been made to the project and what impact they have on the project drainage study, if any.

A. Project revisions since October 8, 2009

Since October 8, 2009, the Fuerte Ranch Estates project has undergone several minor changes to the driveway locations along Damon Lane and the grading scheme. Specifically:

- Combined private driveway locations along Damon Lane: Lots 7 through 12 front on Damon Lane and were previously shown with independent driveways accessing Damon Lane. At the request of the County of San Diego Department of Public Works (DPW), these independent driveways have been combined in pairs. Thus lots 7 & 8 share a single opening to Damon Lane, lots 9 & 10 share an opening, and lots 11 & 12 share an opening.
- 2. Revised pad grades on lots 7, 9, 11, 12, 13, & 14: The pad grades on lots 7, 9, & 11 have been changed to reflect a new driveway access point to Damon Lane. These lots were all lowered between 4 and 5 feet, which resulted in lower fill slopes along Damon Lane. The pad grades on lots 12 & 13 were also lowered to provide a maximum slope height along Damon Lane of 5 feet. These lots were lowered 2 to 3 feet. The pad grade on lot 14 was lowered 2 feet to provide a smoother transition between lots 13 and 15.
- 3. Removed retaining wall from lot 8; added retaining wall on lots 7 & 9: The retaining wall previously shown on lot 8 has been removed. A retaining wall has been added on lot 7 and lot 9. These wall changes were a result of the pad grade changes mentioned in item 2 above.

B. Effects of project revisions on drainage calculations and proposed drainage facilities

- 1. Combined private driveway locations along Damon Lane: pairing the driveways for lots 7-12 will not have a measurable effect on the amount of proposed runoff from these lots, nor the flow direction for this runoff. These lots will still drain to Damon Lane and the runoff collected in a new curb inlet along Damon Lane. An updated drainage study will be prepared during the final engineering stage that will take any noticeable changes into account.
- 2. Revised pad grades on lots 7, 9, 11, 12, 13, & 14: revising the pad grades on these lots will not have a measurable effect on the amount of proposed runoff from these lots. Lots 7-12 will still drain towards Damon Lane, and lot 13 will now drain towards Damon Lane as well, instead of towards Street 'A'. This may require a larger curb inlet along Damon Lane to handle the runoff from lot 13. Lot 14 will still drain towards

- Street 'A'. An updated drainage study will be prepared during the final engineering stage that will take any noticeable changes into account.
- 3. Removed retaining wall from lot 8; added retaining wall on lots 7 & 9: Removing the wall from lot 8 and adding walls to lots 7 & 9 will not have a measurable effect on the amount of proposed runoff from these lots.

C. Conclusions

As shown above, the recent changes to the Fuerte Ranch Estates project do not warrant a revised drainage study at this time. During the final engineering stage an updated report will be prepared that will take these changes into account, as well as any additional changes that may arise during final engineering. This updated report will also address any new regulations imposed by the County regarding drainage and stormwater issues, including Low Impact Development (LID) requirements. (The project drainage study as approved did not address LID requirements as they were not required at the time the study was reviewed. However, Polaris Development Consultants did analyze the LID requirements as they relate to Fuerte Ranch Estates and provided a letter to the County specifying how this project is in compliance with the current LID requirements – letter dated September 30, 2008, addressed to Kim Sheredy, DPLU.)